Earache

Schmitt-Thompson Clinical Content

DEFINITION

- Pain or discomfort in or around the ear
- Child reports an earache
- Younger nonverbal child acts like he did with previous ear infection (e.g., has a cold, new onset of crying and waking frequently)
- **Also Included:** recently FINISHED antibiotics for ear infection and recurrent earache
- **Excluded:** Pain from a traumatic ear injury. See that guideline.
- **Note to triager:** If cough present, when triage complete, also see Cough guideline.

PAIN SEVERITY is defined as:

- **MILD:** doesn't interfere with normal activities
- **MODERATE:** interferes with normal activities or awakens from sleep
- **SEVERE:** excruciating pain, can't do any normal activities, severe crying
- Triager Tip - Assessment of Pain Severity: Base it on the child's current behavior. Ask: "What does the pain keep your child from doing?" Do not ask: "Is the pain Mild, Moderate or Severe?" Reason: Many parents and teens will choose "Severe".

INITIAL ASSESSMENT QUESTIONS

1. LOCATION: "Which ear is involved?"
2. ONSET: "When did the ear start hurting?"
3. SEVERITY: "How bad is the pain?" (Dull earache vs screaming with pain)
   - MILD: doesn't interfere with normal activities
   - MODERATE: interferes with normal activities or awakens from sleep
   - SEVERE: excruciating pain, can't do any normal activities
4. URI SYMPTOMS: "Does your child have a runny nose or cough?"
5. FEVER: "Does your child have a fever?" If so, ask: "What is it, how was it measured and when did it start?"
6. CHILD'S APPEARANCE: "How sick is your child acting?" " What is he doing right now?" If asleep, ask: "How was he acting before he went to sleep?"
7. PAST EAR INFECTIONS: "Has your child had frequent ear infections in the past?" If yes, "When was the last one?"

- Author's note: IAQ's are intended for training purposes and not meant to be required on every call.

TRIAGE ASSESSMENT QUESTIONS

Call EMS 911 Now

Sounds like a life-threatening emergency to the triager

CA: 50, 7

See More Appropriate Guideline

Ear tubes in place

Go to Guideline: Ear Tubes Follow-up Call (Pediatric)

[1] Diagnosed ear infection within past 10 days (may or may not be on antibiotics) AND [2] symptoms continue

Go to Guideline: Ear Infection Follow-up Call (Pediatric)

[1] Painful ear canal AND [2] has been swimming

Go to Guideline: Ear - Swimmer's (Pediatric)

Full or muffled sensation in the ear, but no pain

Go to Guideline: Ear - Congestion (Pediatric)

Airplane or mountain travel prior to earache

Go to Guideline: Ear - Congestion (Pediatric)

Pierced ear symptoms

Go to Guideline: Ear Piercing Questions (Pediatric)

[1] Crying AND [2] cause is unclear

Go to Guideline: Crying - 3 Months and Older (Pediatric)

Injury to the ear

Go to Guideline: Ear Injury (Pediatric)

Go to ED Now

[1] Can't move neck normally AND [2] fever

R/O: meningitis, retropharyngeal abscess

CA: 51, 7

Go to ED Now (or PCP triage)

Long, pointed object was inserted into the ear canal (e.g. a pencil or stick)

R/O: perforated eardrum, damaged ossicles, FB

CA: 52, 7

[1] Fever AND [2] > 105 F (40.6 C) NOW or RECURRENT by any route OR axillary > 104 F (40 C)

R/O: serious bacterial infection

CA: 52, 15, 7

[1] Fever AND [2] weak immune system (sickle cell disease, HIV, chemotherapy, organ transplant, adrenal insufficiency, chronic oral steroids, etc)

R/O: serious bacterial infection. Note: if available, refer to established specialist.

CA: 52, 7

Child sounds very sick or weak to the triager

Reason: severe acute illness or serious complication suspected

CA: 52, 7

See HCP (or PCP Triage) Within 4 Hours

[1] SEVERE pain (excruciating) AND [2] not improved 2 hours after pain medicine (ibuprofen preferred)

R/O: severe otitis media, severe headache

CA: 53, 13, 3, 8, 7

[1] Earache causes inconsolable crying AND [2] not improved 2 hours after pain medicine

R/O: severe otitis media

CA: 53, 13, 3, 8, 7

[1] Pink or red swelling on bone behind the ear AND [2] fever

R/O: mastoiditis

CA: 53, 2, 8, 7

New onset of balance problem (e.g., walking is very unsteady or falling)

R/O: associated labyrinthitis

CA: 53, 8, 7

[1] Cochlear implant AND [2] fever

R/O: ear infection

CA: 53, 2, 8, 7

See PCP Within 24 Hours

Fever

CA: 54, 1, 2, 3, 5, 6, 7

Pus or cloudy discharge from ear canal

CA: 54, 5, 1, 2, 3, 8, 7

Pus stuck on eyelids (Exception: only in corner of eye)

R/O: otitis-conjunctivitis syndrome with amoxicillin resistant organism

CA: 54, 20, 2, 3, 21, 22, 8, 7

[1] Cochlear implant AND [2] no fever

R/O: ear infection

CA: 54, 1, 2, 3, 5, 6, 7

[1] Earache AND [2] MODERATE pain OR SEVERE pain inadequately treated per guideline advice

R/O: ear infection

CA: 54, 1, 2, 3, 4, 5, 6, 7

[1] Age < 2 years AND [2] ear infection suspected by triager

Reason: recognizes child too young to report earache

CA: 54, 1, 2, 3, 5, 8, 7

Outer ear is red, swollen and painful

R/O: cellulitis and risk for ear cartilage damage

CA: 54, 2, 8, 7

Call PCP Within 24 Hours

[1] Child has frequent ear infections AND [2] caller insists prescription for antibiotic be called in

CA: 60, 19, 2, 3, 4, 18, 7

See PCP Within 3 Days

[1] Earache AND [2] MILD pain AND [3] no fever AND [4] age > 2 years

CA: 55, 17, 13, 3, 18, 7

Recurrent transient ear pain

CA: 55, 10, 14, 8, 7

Home Care

Airplane or mountain travel causes earache (barotitis)

CA: 58, 10, 16, 14, 18, 7

[1] Transient ear pain AND [2] lasted < 20 minutes

Reason: probably due to a blocked eustachian tube or cold weather

CA: 58, 9, 10, 11, 12, 7

CARE ADVICE (CA) -

1. **Reassurance and Education**:
   - Your child may have an ear infection, but it doesn't sound serious.
   - Diagnosis and treatment can safely wait until morning if the earache begins after office hours.
2. **Pain Or Fever Medicine**:
   - For pain relief or fever above 102 F (39 C), give acetaminophen (e.g., Tylenol) every 4 hours **Or** ibuprofen (e.g., Advil) every 6 hours as needed. (See Dosage table.)
   - Ibuprofen may be more effective for this type of pain.

3. **Cold or Hot Pack for Ear Pain**:
   - Apply a cold pack or a cold wet washcloth to outer ear for 20 minutes to reduce pain while medicine takes effect.
   - Note: Some children prefer local heat for 20 minutes.
   - **Caution**: cold or hot pack applied too long could cause frostbite or burn.

4. **Olive Oil Eardrops for Persistent Pain:**
   - Exception: Avoid ear drops if ear discharge, ear tubes or hole in eardrum. Also, during the day, do not use any eardrops if the child will be seen later that day. Reason: May make it difficult to visualize the eardrums. It is okay to use at night to help the child get back to sleep.
   - For severe earache unresponsive to oral pain medicine, recommend 3 drops of plain olive oil into the ear canal. Another option is plain mineral oil (baby oil).
   - Repeat once in 4 hours, if needed.
   - Reason ear drops work: They cover the raw, painful surface of the eardrum.
   - **Canada**: Auralgan eardrops are available OTC in Canada. Can recommend for severe ear pain. Instill 3 drops every 4 hours as needed.

5. **Ear Discharge Treatment:**
   - If pus or cloudy fluid is draining from the ear canal, this means the eardrum has a small tear in it caused by the pressure.
   - This usually heals nicely after the ear infection is treated.
   - Wipe the discharge away as it appears.
   - Avoid plugging with cotton. (Reason: retained pus can cause infection of the lining of the ear canal.)

6. **Call Back If**
   - Severe pain persists over 2 hours after eardrops and oral pain medicine
   - Your child becomes worse

7. **Care Advice** given per Earache (Pediatric) guideline.

8. **Call Back If**
   - Your child becomes worse

9. **Reassurance and Education - Recent-Onset Earache (Less Than 20 Minutes)**:
   - It could be a mild earache from a blocked eustachian tube. Let's see what happens.

10. **Increase Swallowing and Chewing:**
    - Assume the cause is a blocked eustachian tube.
    - Help your child swallow water while the nose is pinched closed. (Reason: creates a vacuum in the nose that helps open up the eustachian tube.)
    - After age 4, can also use chewing gum.

11. **Don't Give Pain Meds**:
    - Don't give pain medicines. (Reason: if earache persists, will need to be seen)

12. **Call Back If**
    - Pain recurs

13. **Pain Medicine**:
    - Continue acetaminophen every 4 hours **Or** ibuprofen every 6 hours, until seen. (See Dosage table.)

14. **Pain Medicine**:
    - If your child acts like he's having pain or discomfort for over 20-30 minutes, give a dose of acetaminophen or ibuprofen. (See Dosage table.)

15. **Fever Medicine**:
    - To bring down fever, give acetaminophen every 4 hours **Or** ibuprofen every 6 hours (See Dosage table).

16. **Prevention During Airplane/Mountain Travel**
    - Swallow during descent using fluids or a pacifier.
    - Children over age 4 can chew gum during descent.
    - Yawning during descent also can open the middle ear.

17. **Reassurance and Education:**
    - Children over 2 years of age with **Mild** earaches and no fever usually have viral ear infections that heal on their own.
    - Since 2004, the AAP has recommended that these children do not need antibiotics.
    - They usually do fine just with treatment for pain and other symptoms.
    - This approach also reduces the rate of antibiotic resistance.
    - Your child's PCP can check the ears during regular office hours.

18. **Call Back If**:
    - Fever occurs
    - Pain becomes worse
    - Your child becomes worse

19. **Reassurance and Education:**
    - Inform caller that PCPs rarely call in antibiotics without examining the ear.
    - Reassure that ear pain can be controlled with pain medicine and eardrops.
    - Reassure that examining child within 24 hours is quite safe.

20. **Reassurance and Education:**
    - Your child may have an ear infection, but it doesn't sound serious.
    - Diagnosis and treatment can safely wait until morning if the earache begins after office hours.
    - The antibiotic given for the ear infection should also clear up the eye infection.

21. **Remove Pus:**
    - Remove the dried and liquid pus from the eyelids with warm water and wet cotton balls every hour as needed.
    - The pus is contagious, so dispose of it carefully.
    - Wash your hands after contact with the drainage.
    - Once you have antibiotic eyedrops, they will not have a chance to work unless the pus is removed first, each time before they are put in.

22. **Don't Wear Contacts:**
    - Children with contact lenses need to switch to glasses temporarily.
    - Reason: To prevent damage to the cornea.
    - Disinfect the contacts before wearing them again (or discard them if disposable).

50. **Call EMS 911 Now**:
    - Your child needs immediate medical attention. You need to hang up and call 911 (or an ambulance).
    - Triager Discretion: I'll call you back in a few minutes to be sure you were able to reach them.

51. **Go To ED Now**:
    - Your child needs to be seen in the Emergency Department immediately.
    - Go to the ED at _____ Hospital.
    - Leave now. Drive carefully.

52. **Go To ED/UCC Now (or PCP Triage):**
    - **If No PCP (Primary Care Provider) Second-Level Triage**: Your child needs to be seen within the next hour. Go to the ED/UCC at _____ Hospital. Leave as soon as you can.
    - **If PCP Second-Level Triage Required**: Your child may need to be seen. Your doctor (or NP/PA) will want to talk with you to decide what's best. I'll page the on-call provider now. If you haven't heard from the provider (or me) within 30 minutes, go directly to the ED/UCC at _____ Hospital.

    Sources of Care:
    - **Triager Caution**: In selecting the most appropriate care site, you must consider both the severity of the patient's symptoms AND what resources are available at that care site.
    - **ED:** Patients who may need surgery, need hospitalization, sound seriously ill or may be unstable need to be sent to an ED. Likewise, so do most patients with complex medical problems and serious symptoms.
    - **UCC is Open:** Some Urgent Care Centers (UCCs) can manage patients who are stable and have less serious symptoms (e.g., minor illnesses and injuries). The triager must know the UCC capabilities before sending a patient there. If unsure, call ahead.
    - **Office is Open**: If patient sounds stable and not seriously ill, consult PCP (or follow your office policy) to see if patient can be seen NOW in office.

53. **See HCP (or PCP Triage) Within 4 Hours**:
    - **If Office Will Be Open:** Your child needs to be seen within the next 3 or 4 hours. Call your doctor's (or NP/PA) office as soon as it opens.
    - **If Office Will Be Closed and No PCP (Primary Care Provider) Second-Level Triage:** Your child needs to be seen within the next 3 or 4 hours. A nearby Urgent Care Center (UCC) is often a good source of care. Another choice is to go to the ED. Go sooner if your child becomes worse.
    - **If Office Will Be Closed and PCP Second-Level Triage Required:** Your child may need to be seen. Your doctor (or NP/PA) will want to talk with you to decide what's best. I'll page the on-call provider now. If you haven't heard from the provider (or me) within 30 minutes, call again. **Note:** If on-call provider can't be reached, send to UCC or ED.

    Note to Triager:
    - Use nurse judgment to select the most appropriate source of care.
    - Consider both the urgency of the patient's symptoms AND what resources may be needed to evaluate and manage the patient.

    Sources of Care:
    - **ED:** Patients who may need surgery or hospital admission need to be sent to an ED. So do most patients with serious symptoms or complex medical problems.
    - **UCC:** Some UCCs can manage patients who are stable and have less serious symptoms (e.g., minor illnesses and injuries). The triager must know the UCC capabilities before sending a patient there. If unsure, call ahead.
    - **OFFICE:** If patient sounds stable and not seriously ill, consult PCP (or follow your office policy) to see if patient can be seen NOW in office.

54. **See PCP Within 24 Hours:**
- **If Office Will Be Open:** Your child needs to be examined within the next 24 hours. Call your child's doctor (or NP/PA) when the office opens and make an appointment.
- **If Office Will Be Closed:** Your child needs to be examined within the next 24 hours. A clinic or an urgent care center is often a good source of care if your doctor's office is closed or you can't get an appointment.
- **If Patient Has No PCP:** Refer patient to a clinic or urgent care center. Also try to help caller find a PCP (medical home) for future care.

Note to Triager:
- Use nurse judgment to select the most appropriate source of care.
- Consider both the urgency of the patient's symptoms AND what resources may be needed to evaluate and manage the patient.

55. **See PCP Within 3 Days**:
- Your child needs to be examined within 2 or 3 days.
- **PCP Visit:** Call your doctor (or NP/PA) during regular office hours and make an appointment. A clinic or urgent care center are good places to go for care if your doctor's office is closed or you can't get an appointment. **Note:** If office will be open tomorrow, tell caller to call then, not in 3 days.
- **If Patient Has No PCP (Primary Care Provider):** Try to help caller find a PCP for future care (e.g., use a physician referral line). Having a PCP or "medical home" means better long-term care.

56. **See PCP Within 2 Weeks**:
- Your child needs an evaluation for this ongoing problem within the next 2 weeks.
- **PCP Visit:** Call your child's doctor (or NP/PA) during regular office hours and make an appointment.
- **If Patient Has No PCP (Primary Care Provider):** A primary care clinic is where you need to be seen for chronic health problems. **Note:** Try to help caller find a PCP (e.g., use a physician referral line). Having a PCP or 'medical home' means better long-term care.

58. **Home Care**:
- You should be able to treat this at home.

59. **Call PCP Now**:
- You need to discuss this with your child's doctor (or NP/PA).
- I'll page the on-call provider now. If you haven't heard from the provider (or me) within 30 minutes, call again.

60. **Call PCP Within 24 Hours:**
- You need to discuss this with your child's doctor (or NP/PA) within the next 24 hours.
- **If Office Will Be Open**: Call the office when it opens tomorrow morning.
- **If Office Will Be Closed**: I'll page the on-call provider now. Exception: From 9 pm to 9 am. Since this isn't urgent, we'll hold the page until morning.

61. **Call PCP When Office Is Open**:
- You need to discuss this with your child's doctor (or NP/PA) within the next few days.
- Call the office when it is open.

FIRST AID

N/A

BACKGROUND INFORMATION

Matching Pediatric Handouts for Callers

Printed home care advice instructions for patients have been written for this guideline. If your software contains them, they can be sent to the caller at the end of your call. Here are the names of the pediatric handouts that relate to this topic:

- Earache - From Air Travel
- Earache - Symptom
- Fever - How to Take the Temperature
- Fever - Facts Versus Myths
- Acetaminophen (Tylenol) Dosage Table - Children
- Ibuprofen (Advil, Motrin) Dosage Table - Children

Causes of Earaches

- **Ear Infection (Otitis Media).** An infection of the middle ear (space behind the eardrum) is the most common cause. Ear infections can be caused by viruses or bacteria. Usually, a doctor can tell the difference by looking at the eardrum. Most ear infections with mild symtoms are caused by viruses. Antibiotics are not helpful. Ear infections peak at age 6 months to 2 years. The onset of ear infections peak on day 3 of a cold.
- **Swimmer's Ear.** An infection or irritation of the skin that lines the ear canal. Main symptom is itchy ear canal. If the canal becomes infected, it also becomes painful. Mainly occurs in swimmers and in the summer time.
- **Ear Canal Injury.** A cotton swab or fingernail can cause a scrape in the canal.
- **Ear Canal Abscess.** An infection of a hair follicle in the ear canal can be very painful. It looks like a small red bump. Sometimes, it turns into a pimple. It needs to be drained.
- **Earwax.** A big piece of hard earwax can cause mild ear pain. If the wax has been pushed in by Q-tips, the ear canal can become blocked. This pain will be worse.
- **Ear Canal Foreign Body.** Young children may put small objects in their ear canal. It will cause pain if object is sharp or pushed in very far.
- **Airplane Ear.** If the ear tube is blocked, sudden increases in air pressure can cause the eardrum to stretch. The main symptom is severe ear pain. It usually starts when coming down for a landing. It can also occur during mountain driving.
- **Pierced Ear Infections.** These are common. If not treated early, they can become very painful.
- **Mastoiditis.** Bacterial infection of the air cells in the mastoid bone behind the ear. The mastoid area becomes pink, swollen and tender. Uncommon complication of an ear infection.
- **Referred Pain.** Ear pain can also be referred from diseases not in the ear. Tonsil infections are a common example. Tooth decay in a back molar can seem like ear pain. Mumps can be reported as ear pain. Reason: the mumps parotid gland is in front of the ear. Jaw pain (TMJ syndrome) can masquerade as ear pain.

Ear Infections: 2013 AAP Clinical Practice Guideline for Children 6 Months through 12 Years of Age

- This important Guideline contains 17 Key Action Statements (evidence-based recommendations). The following are ones that mainly apply to telephone triage and advice:
- Diagnosis of AOM requires visualization of the TM and should not be attempted by telephone alone. Diagnostic criteria for AOM are discussed in depth. Bulging of the TM must be present. The diagnostic specificity of other symptoms and signs is carefully documented.
- Severe AOM is defined as ear infection with moderate or severe otalgia (ear pain) OR fever equal to

or higher than 39 C (102.2 F).
- Mild AOM is defined as mild otalgia AND fever < 39 C (102.2 F). Importance: Mild AOM can be watched for natural resolution versus worsening of symptoms.
- Treatment of Pain (Otalgia): The treatment of pain should never be overlooked. Antibiotic therapy does not provide pain relief during the first 24 hours after antibiotics are started. Therefore, pain management should be addressed regardless of the use of antibiotics.
- Oral analgesics: Acetaminophen or ibuprofen have proven benefit (evidence-based).
- Topical analgesic eardrops (such as lidocaine or benzocaine) compared to saline eardrops provided reduced otalgia at 10 and 30 minutes. Duration of benefit unknown.
- Oil eardrops: "may have limited effectiveness, but no control studies"
- External application of heat or cold: "may have limited effectiveness, but no control studies"
- Note: Because the latter home remedy may have placebo value and is harmless, it remains in the guideline as an intervention to be used until oral pain killers take effect.
- Antibiotic Treatment: Bacterial AOM remains the most common condition for which antibiotics are prescribed for children in the U.S. Amoxicillin remains the first line drug for most cases. If the child also has purulent conjunctivitis, Augmentin is recommended as the initial drug of choice. Average duration of antibiotic recommended: age less than 2 years: 10 days, 2-5 years: 7 days, and 6 years and older: 5 days.
- Observation (watchful waiting) Option: Some clinicians recommend close observation and close follow-up for selected patients with AOM. Those patients must be 6 months of age or older, have a fever less than 39 C (102.2 F) and have mild otalgia for less than 48 hours. The only change from the previous AAP guideline is the cutoff previously was 2 years or older. Research supports the safety of this change in age range. In studies using Observation with pain management, 70% of patients had natural resolution of symptoms without the need for antibiotic therapy.
- When Observation is used, antibiotic therapy should be started if "the child worsens OR fails to improve within 72 hours of onset of symptoms". Two additional triage questions were added to the Ear Infection Follow-Up guideline to cover these follow-up outcomes. One allows the triage nurse to approve filling or starting the prescription the parent already has. The other places the call back to the PCP to request a prescription.
- Summary: As AAP Clinical Practice Guidelines go, this one is extremely helpful. It is 30 pages long, but worth reading. If implemented in daily practice, it will prevent significant over-diagnosis and over-treatment of ear infections.
- Reference: Pediatrics 2013; 131: e964-e999

Symptoms Cannot Predict Presence of AOM: Must Visualize Tympanic Membrane

- Study population: 469 children age 6 to 35 months (otitis prone age group) and parents suspected AOM
- The following symptoms were the reasons reported by the parents: restless sleep 29%, irritability and crying 18%, ear rubbing 14%, ear pain 5% and fever 3%.
- Results: None of these symptoms could differentiate children with AOM from those without AOM based on otoscopy findings.
- Importance: AOM should not be diagnosed by telephone. As stated in the AAP 2013 guideline, otoscopy is required for diagnosing bacterial AOM.
- Reference: Laine, Pediatrics 2010.

AAP (2004 Guideline): Treating Mild Otitis Media With Analgesics Rather Than Antibiotics

- Because of rising antibiotic resistance, past AAP clinical practice guidelines (2004) for the management of otitis media discourage the use of antibiotics for nonsevere cases (called the "observation option").
- "Nonsevere otitis" is defined as MILD ear pain and fever < 39 C (or no fever). The safest age group for observation is children over age 2 years.
- If all 3 criteria are present, these children can be offered symptomatic care and safely observed for 48 to 72 hours.

- In follow-up, ear symptoms improved in 60% by 24 hours and resolved spontaneously in 75% by 7 days.
- This approach assumes that all children with ear pain are examined but the AAP does not give a timeline.
- If the children over age 2 years with mild earache and no fevers were seen within 72 hours during office hours (rather than within 24 hours), many weekend ED referrals could be prevented.
- Since 2008, the Earache guideline has used these recommendations to defer visits of low-risk children with earache until office hours. Again, the 3 low risk factors used in the guideline are: age > 2 years, MILD otalgia (earache) and no fever (rather than the AAP cutoff of fever < 102 F or 39 C).

Auralgan Analgesic Eardrops - No Longer Available in US (FDA 2015)

- 2015 FDA major change: Benzocaine-antipyrine ear drops have never been approved by the FDA. As of July 2015, they will no longer be available in U.S. pharmacies. Reason the FDA gives for this enforcement: Unproven effectiveness (not because of side effects).
- Previous information found in this protocol: Analgesic eardrops have long been prescribed in selected patients to reduce severe pain from otitis media (Hoberman 1997). Many teen and adult patients insist that these products give them pain relief.
- Generic analgesic eardrops and brand name Auralgan eardrops have identical ingredients (benzocaine and antipyrine). Both are prescription drugs in the U.S. In 2008, Deston Therapeutics, the company that makes Auralgan, changed the formulation and increased the price to $140/bottle. In the U.S., only generic analgesic ear drops had been previously recommended because of cost-savings.
- **Canada**: Can use Auralgan eardrops for severe pain. Reason: Available OTC in Canada.

Over-the-counter (OTC) Drops for Ear Pain - Not FDA Approved

- There are several OTC drops available for ear pain. None of them are FDA approved and are NOT recommended in this guideline.
- Most contain homeopathic plant/herbal ingredients, such as Calcarea Carbonica, Chamomilla, Lycopodium, Pulsatilla, Sulphur, Belladonna, Mercurius solubilis.
- An additional OTC product contains 4% lidocaine. Despite containing a known pharmceutical ingredient, this product has also not been FDA approved.

Efficacy of Olive Oil Ear Drops

- The evidence for the benefit of olive oil ear drops is weak. The Hoberman study is why they were added to care advice years ago. I also had some patients with bilateral AOM to whom I added olive oil unilaterally and the patient reported that ear quickly felt better.
- From the AAP 2013 Clinical Practice Guideline page e973: Topical analgesic eardrops (such as lidocaine or benzocaine) compared to saline eardrops provided reduced otalgia at 10 and 30 minutes. Duration of benefit unknown. Oil eardrops: "may have limited effectiveness, but no control studies"
- From the 1997 study by Hoberman: Auralgan and olive oil (the placebo) gave similar pain reduction. Auralgan was statistically superior to olive oil only at the 30 minute reading. The dosage was 5 drops given once. The author had expected Auralgan to far out-perform olive oil.

Expert Reviewer

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SEARCH WORDS

BLOCKAGE OF EUSTACHIAN TUBES

BLOCKED EUSTACHIAN TUBES

EAR

EAR ACHE

EAR CANALS

EAR DRAINAGE

EAR INFECTIONS

EAR PAIN
EARACHE
EARDRUMS
EAR-PULLING
EARS
EUSTACHIAN TUBES
OTITIS EXTERNA
OTITIS MEDIA
OUTER EARS
PAINFUL EAR CANALS
PERFORATED EARDRUMS
PULLING AT EARS
RUPTURED EARDRUM
SWIMMER'S EARS

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